

BOOK REVIEWS

Control System Components

Author: M.D.Desai

Publisher: Prentice Hall india

pages:437

Price: Rs. 295

The purpose of this book is to acquaint the student with the engineering principles and fundamental characteristics of a number of components used in the implementation of many types of control systems. The operation of each component is discussed and explained in detail in order to illustrate the function and action of each component in the composite system. Examples are used wherever possible to illustrate the principles discussed. Diagrammatic illustrations are used profusely throughout the book to make the descriptive text interesting and self-explanatory.

Although a large number of books dealing with the theory of control engineering are available, most of them do not deal with the varied range of components used in modern control systems. This book is an attempt to fill this need. It comprehensively covers many typical components of primary interest to the control-system engineer. A number of different types of electrical, electromechanical, electronic, hydraulic and pneumatic control devices, which form integral parts of open-loop and closed-loop control systems, have been presented to enable the students to understand all the types of control systems or equipment that they may encounter in different fields of industry.

This book is especially designed to cater to the need of a one-semester course in Control System Components, particularly for the undergraduate students of Instrumentation and Control Engineering. It will also be a highly useful text for the students of Electrical Engineering and Mechanical Engineering during their study of the theory of Control Engineering. This book will teach them about the components required to build practical control systems.

Advanced FPGA Design: Architecture Implementation and Optimization

Author: Steve Kilts

Publisher: John Wiley & Sons

Pages: 336

Price: US Dollars 99.0

This book provides the reader with issues of advanced FPGA design as the underlying theme of the work. In practice, an engineer typically needs to be mentored for several years before these principles are appropriately utilized. The topics that are discussed in this book are essential to designing FPGA's beyond moderate complexity. The goal of the book is to present practical design techniques that are otherwise only available through mentorship and real-world experience. There are a number of books on FPGA design, but few of these truly address advanced real-world topics in detail. This book attempts to cut out the fat of unnecessary theory, speculation on future technologies, and the details of outdated technologies. It is written in a terse, concise format that addresses the various topics without wasting the reader's time. Many sections in this book assume that certain fundamentals are understood, and for the sake of brevity, background information and/or theoretical frameworks are not always covered in detail. Instead, this book covers in-depth topics that have been encountered in real-world designs. In some ways, this book replaces a limited amount of industry experience and access to an experienced mentor and will hopefully prevent the reader from learning a few things the hard way. It is the advanced, practical approach that makes this book unique.